

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/717,465	11/21/2003	Alexandre Corjon	245498US41XDIV	8127	
22850	7590 12/06/2004		EXAMINER		
	PIVAK, MCCLELLAN	HOLZEN, STEPHEN A			
1940 DUKE STREET ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER	
	•		3644		
			DATE MAILED: 12/06/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	No.	Applicant(s)				
Office Action Summary		10/717,465		CORJON ET AL.				
		Examiner	<del></del>	Art Unit				
		Stephen A. F	łolzen	3644				
Period fo	The MAILING DATE of this communication Reply	on appears on the co	over sheet with the c	correspondence ad	idress			
THE - Exte after - If the - If NC - Failt Any	ORTENED STATUTORY PERIOD FOR I MAILING DATE OF THIS COMMUNICAT nsions of time may be available under the provisions of 37 of SIX (6) MONTHS from the mailing date of this communicat experiod for reply specified above is less than thirty (30) days to period for reply is specified above, the maximum statutory are to reply within the set or extended period for reply will, by the property of the communication	TION. CFR 1.136(a). In no event, tion. s, a reply within the statutor period will apply and will ey statute, cause the applicat	however, may a reply be tin y minimum of thirty (30) day spire SIX (6) MONTHS from tion to become ABANDONE	nely filed  s will be considered time the mailing date of this of (35 U.S.C. § 133).	ely. communication.			
Status								
1)[	Responsive to communication(s) filed on	l						
2a)[]	This action is <b>FINAL</b> . 2b)	This action is non	-final.					
3)[]	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
5)□ 6)⊠	Claim(s) 1-17 is/are pending in the applic 4a) Of the above claim(s) is/are with Claim(s) is/are allowed. Claim(s) 1-17 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction	ithdrawn from consi						
Applicat	ion Papers							
9)	The specification is objected to by the Ex	aminer.						
10)[	The drawing(s) filed on is/are: a)	accepted or b)	objected to by the	Examiner.				
	Applicant may not request that any objection		•	• •				
11)	Replacement drawing sheet(s) including the country the oath or declaration is objected to by the country to the country that	•	<b>.</b>	•	• •			
Priority (	under 35 U.S.C. § 119							
а)	Acknowledgment is made of a claim for for All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International Esee the attached detailed Office action for	uments have been r uments have been r e priority documents Bureau (PCT Rule 1	received. received in Applicati s have been receive 7.2(a)).	ion No. <u>10/080,40</u> ed in this National	<del></del>			
Attachmen	t(s)							
1) Notic	e of References Cited (PTO-892)	4)	Interview Summary					
3) 🛛 Infori	e of Draftsperson's Patent Drawing Review (PTO-9- mation Disclosure Statement(s) (PTO-1449 or PTO/- r No(s)/Mail Date <u>2/23/2004</u> .	SB/08) 5)	Paper No(s)/Mail Da Notice of Informal P Other:		O-152)			

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3,10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Crouch (WO 99/00297). Crouch discloses every aspect and limitation found in these claims. (see abstract and figure 2A)
- 3. Claims 1, 2, 6, 7-13,17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lessen (3,881,669). Lessen disclose every element and limitation found in these claims. (see Figures 1, 2 and Col. 4, lines 20-25)
- 4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application/Control Number: 10/717,465

Art Unit: 3644

5. Claims 1-4 and 10-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Huenechke (6,513,716). Huenechke discloses every element and limitation found in these claims. (see Figures 7-9 and 12)

Page 3

6. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crouch or Huenechke in view of Tangler (4,406,336). Neither Crouch nor Huenechke disclose a circular or elliptical cross section. Tangler however discloses that it is known to use an unstreamed element that has an elliptical cross section for exciting the instability modes. (see #21) It would have been obvious at the time of the invention to one having ordinary skill in the art to include the teachings of Tangler into the devices of Crouch or Huenechke for the purpose of reducing wake turbulence (see Col. 7, lines 5-30.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen A. Holzen whose telephone number is 703-308-2484. The examiner can normally be reached on M-F 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 703 305-7421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sah

TERI PHAM LUU SUPERVISORY PRIMARY EXAMINER